

In the Drawings:

Please approve the drawing changes as shown in red on the attached marked-up Annotated Sheet Showing Changes of the drawings. A separate Submission of Formal Drawings incorporating the drawing changes is also enclosed.

### **REMARKS**

As a preliminary matter, Applicants appreciate the Examiner's indication of allowable subject matter contained in claims 8-10. Claim 8 is generally written in independent form. Accordingly, Applicants respectfully request allowance of independent claim 8 and its dependent claims 9-10.

Claims 6-7 stand objected to because of informalities. In response, Applicants amended claim 6 to be dependent on claim 5. For this reason, withdrawal of the objection to claims 6-7 is respectfully requested.

Claim 1 stand rejected under 35 U.S.C. 102(b) as being anticipated by Ikeda et al. (U.S. Publication No. 2001/0048568 A1). Since claim 1 is cancelled, the rejection is moot.

Claims 2-4 and 11-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bonyhard (U.S. Patent No. 5,991,104), in view of Ikeda. In response, Applicants amended the claims to depend from new claim 22 that defines the master magnetic body, which contacts against the magnetic disk, as contacting the contact surface bordered along a contour of the servo pattern, such that a circumferential extent of the depression is set larger at an outer position of the magnetic disk than an inner position of the magnetic disk, and respectfully traverse.

On page 3, third paragraph of the Office Action (Paper No. 08042003) the Examiner states that Bonyhard fails to disclose a circumferential extent of the depression being set larger at an outer position of the magnetic disk; a magnet designed to face the

master magnetic body, the magnet applying the magnetic field to the master magnetic body so as to form a magnetic field for writing within the depression; and a position sensor related to the magnet so as to detect a position of the magnet in the radial direction of the magnetic disk. The Examiner cites Ikeda as teaching the insufficiencies of Bonyhard.

Ikeda is cited as disclosing a circumferential extent of a depression being set larger in an outer position of a magnetic disk in an inner position of the magnetic disk as depicted in FIG. 29 and paragraph [0224]. However, FIG. 29 merely shows an exemplary arrangement of permanent magnets 61-65 and 61'-65'. The permanent magnets are arranged on a magnetic yoke 67 (see page 15, paragraphs [0219] and [0220]). Paragraph [0024] of Ikeda merely relates to the magnetic field intensity. Ikeda does not teach or suggest a structure of the master magnetic body, as now defined in new claim 22. Claims 2-4 and 11-21 are amended to ultimately depend from independent claim 22, and are considered allowable based on their chain of dependency from independent claim 22.

Furthermore, with respect to the rejection of claim 2, Applicants traverse the rejection because the cited references fail to disclose (or suggest), among other things, a position sensor. Claim 2 defines a position sensor related to the magnet so as to detect a position of the magnet in a radial direction of the magnetic disk. The Examiner asserts that Ikeda discloses a position sensor on page 8, paragraph [0423], lines 10-13. However, Ikeda merely teaches a servo pattern for generating control signals for tracking servo in determining the position of the head is recorded in the servo signal recording areas. This

description merely relates to the servo pattern, and does not teach or suggest a position sensor.

With respect to claim 11, Applicants traverse the rejection because the cited references fail to disclose the magnetic intensity adjusting mechanism.

The magnetic intensity adjusting mechanism of the present invention is designed to drive the magnet and rotate the magnet around the rotation axis intersecting the surface of the magnetic disk in accordance with the displacement of the magnet in the radial direction. The magnetic intensity adjusting mechanism is exemplified as the angular displacement controlling circuit 44 shown in FIG. 5 of the present application. The master magnetic body is usually designed to increase the inclination angle, which is defined between the depression and radius of the magnetic disk, at a location closer to the outer periphery of the magnetic disk. The magnetic intensity adjusting mechanism changes the attitude of the magnet around the rotation axis in response to a variation in inclination angle. If the attitude of the magnet follows a variation of the inclination angle, the magnetic flux leaked from the magnet is allowed to cross a depression by a minimum length. A magnetic field of maximum intensity is thus reliably formed within the depression. This adjustment contributes to a fine adjustment of the intensity of the magnetic field within a depression.

In the rejection of claim 11, the Examiner cites Ikeda as disclosing the magnetic intensity adjusting mechanism (see page 20, paragraph [0303] and a component designated as “2” in FIGs. 3(a) and 3(b)). Applicants traverse the rejection because the component designated as number “2” is a rotatable spindle. (See page 21, paragraph [0306].

In contrast, the magnetic intensity adjusting mechanism, as recited in amended claim 11, is designed to drive the magnet. The magnetic intensity adjusting mechanism is not designed to drive the magnetic recording medium, as taught in Ikeda. Since the rotation axis defined in the present claim 11 is different from the rotation axis of the spindle, Applicants traverse the rejection of claim 11.

With respect to the rejection of claim 13, the Examiner asserts that Ikeda discloses magnetic poles (see page 15, paragraph [0220], lines 5-12). Paragraph [0220] of Ikeda teaches magnets arranged in two lines, as shown in FIG. 29. The lines of the magnet extend radially with an angle of 6° between them. However, Ikeda is silent about a distance between the master body and the magnets. For this reason, Applicants traverse the rejection as it applies to claim 13.

For all of the above reasons, Applicants request allowance of new claim 22 and withdrawal of the §103 rejection of dependent claims 2-4 and 11-21.

Claims 5-6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bonyhard in view of Ikeda, and further in view of Nakamura et al. (U.S. Publication No. 2003/0043486). Applicants traverse the rejection for the reasons recited above with respect to the rejection of claims 2-4 and 11-21.

Claims 5-6 depend either directly or indirectly from independent claim 22, and therefore all of the dependent claims contain all of the features of their respective base claim, plus additional features. Accordingly, the §103 rejection of claims 5-6 is respectfully traversed for at least the reasons discussed above in traversing the §103 rejection of claims 2-

4 and 11-21, and also because Nakamura fails to overcome the deficiencies of the other cited references. Withdrawal of the §103 rejection of claims 5-6 is respectfully requested.

In addition to new claim 22, new claims 23-24 are added and depend from claim 16 and 19, respectively. New claims 23-24 are believed to be allowable for the reasons recited above.

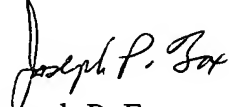
For all of the foregoing reasons, Applicants submit that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

March 14, 2005  
300 South Wacker Drive, Suite 2500  
Chicago, Illinois 60606  
(312) 360-0080  
Customer No. 24978

By:

  
Joseph P. Fox  
Registration No. 41,760

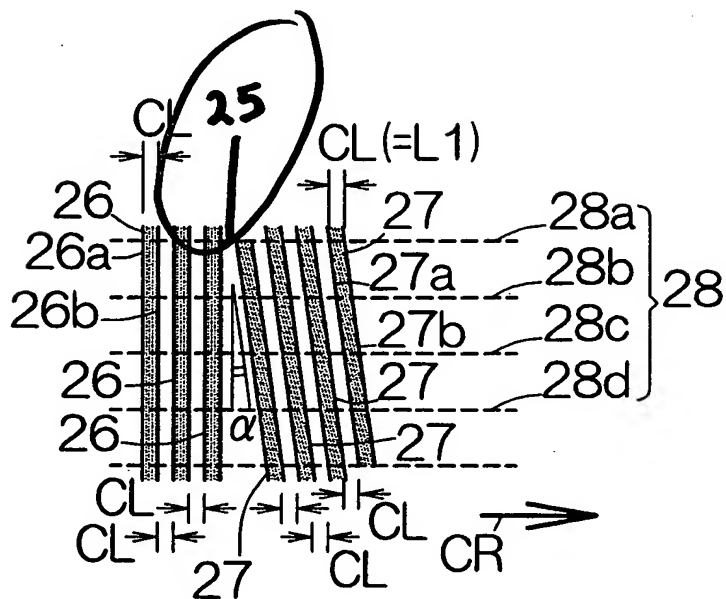


FIG. 3

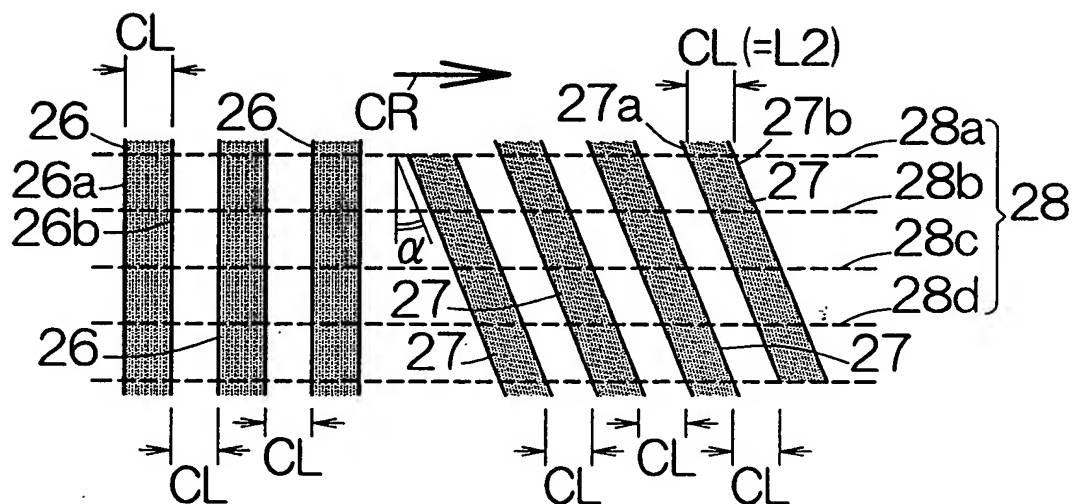


FIG. 4